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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jacklyn M. Dowdy

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HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

AZARIAN, SEYED H

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,728

Applicant(s)

DOWDY, JACKLYN M.

Examiner

Seyed Azarian

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Applicant's arguments, filed, 6/15/2004, see page 9 through 11, of the remarks with respect to the rejection of claims 1-14, 16 and 18-20 have been fully considered but they are not persuasive.

2. In response to applicant's argument that obviousness has not been established, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The Applicant is respectfully reminded that the rejection of the claim 1 is a combination of two references to show nonobviousness (see MPEP 2145 (d)). Moore is modified by Rhoads.

3. Applicants argue in essence that combination of Moore and Rhoads does not teach or suggest claimed limitation "**create a second data from a first data**".

With respect to applicant's argument Examiner disagrees and indicates Moore clearly teaches the following features, (column 5, lines 15-34, a watermark is first embedded in an object (**first data**), and changes are made to the watermarking parameters to bring up the relative strengths of these bits. The object is then water marked anew, with the changed parameter (**second data**), also Fig. 1b, the host computer establishes an appropriate identifying message using clear text (first data), and host computer interfaces with an encryption unit, which converts the clear text message into an ID matrix symbol (second data), (column 11, lines 4-24).

Furthermore Rhoads clearly states that Fig. 1, item 15 (first data), which produce digital

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data or item 20 or code signal (second data) are located on document within the original image.

To reduce counterfeiting, it is desirable that document-reproduction recognize banknotes and refuse to reproduce and disable copying of document, and finally in response to applicant's argument, code signal for decoding crypto key, that uses watermark data to provide high confidence authentication of banknotes corresponding to the face of the bill to reduce such counterfeiting (Fig. 1, column 3, lines 25-64).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify method of Moore according to the teaching of Rhoads because it provides a method to track subsequent use of digital images including derivative images, which identify the source or ownership of images and distinguish between different copies and verify the authenticity of the document from forgery.

Finally with respect to applicant's argument. Applicants argue in essence that Moore does not teach or suggest amended claim 1 "by comparing said **object presented for validation** to both first and second data".

Examiner disagrees and indicates Moore teaches (column 4, lines 43-49, detection of either a visible structure (**first data**) or watermarked data (**second data**), in order that both criteria must be met before a banknote is recognized as genuine (**validation**), also the ID matrix (input data) will be saved and compared to the captured and processed image from the CCD camera and which compares the scanned mark with the mark generated by and stored in the data based to determine the existence of a match (column 23, lines 41-52).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14, 16 and 18-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore (U.S. patent 6,456,729) in view of Rhoads (U.S. patent 6,580,819).

Regarding claim 1, Moore discloses anti-counterfeiting and tracking system comprising;
an anti-counterfeiting method, comprising (column 4, lines 34-43, anti-counterfeiting system which can track various goods);

creating a first data set having data in a first data arrangement (column 15, lines 37-46, creation of the data matrix symbology);

determining whether data on an object presented for validation is consistent with the data of the first or second data arrangement for said first data set; and if the data on said object presented for validation is determined to be consistent with the data of the first or second data arrangement for said first data set, accepting said object presented for validation, else rejecting said object presented for validation column 11, lines 42-56, searches the database for validation and displays the decoded message and column 28, lines 2-15, consists of an identifying mark on the product).

However Moore does not explicitly state, "create a second data from first data". On the other hand Rhoads teaches Fig. 1, item 15 (first data), which produce digital data or item 20 or

code signal (second data) are located on document within the original image. To reduce counterfeiting, it is desirable that document-reproduction recognize banknotes and refuse to reproduce and disable copying of document (column 3, lines 25-64).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify method of Moore according to the teaching of Rhoads because it provides a method to track subsequent use of digital images including derivative images, which identify the source or ownership of images and distinguish between different copies and verify the authenticity of the document from forgery.

Regarding claim 2, Moore discloses the method, further comprising, providing at least one object with said first data set (column 13, lines 1-8, by providing an marks and tracks).

Regarding claim 3, Moore discloses the method, wherein the data within said first data set is modified every time an object is provided with said first data set (column 22, lines 33-45, modifying the code to include the information).

Regarding claim 4, Moore discloses the method, wherein an attribute of the data within said first data set is modified every time an object is provided with said first data set (column 30, lines 45-56, by detecting emission from a second compound within said dye which is excited by absorption of first emission, and verifying the authenticity of symbol);

Regarding claim 5, Moore discloses the method, further comprising; if the data on said object presented for validation is determined to be consistent with the data of the first data arrangement for said first data set: determining whether another object having the first data set in the first data arrangement has previously been accepted rejecting said object presented for validation if it is determined that another object having the first data set in the first data

arrangement has previously been accepted (column 11, lines 9-24, refer to continuous validation and alert the operator if the symbol is different).

Regarding claim 6, Moore discloses the method, wherein said at least one object includes a memory, and wherein providing at least one object with said first data set comprises transferring the first data set to said memory (column 13, lines 49-59 refer to memory).

Regarding claim 8, Moore discloses the method, wherein said at least one object further comprises a clock, said microprocessor accessing the clock to modify the first data set transferred to said memory according to a time interval (column 17, lines 58-65, refer to clock initiated and Fig. 3a, 3b, 3c column 10, lines 1-9 refer to the time function).

Regarding claim 9, Moore discloses the method, further comprising, providing a plurality of objects with said first data set, and wherein the data within said first data set is modified after a preset number of the plurality of objects have been provided with said first data set (Fig. 1a column 10, lines 17-28, plurality of products or production modules).

Regarding claim 11, Moore discloses the method, further comprising, maintaining a record of the first and second data arrangements for said first data set (column 10, lines 17-29, refer to first and second number of production modules).

Regarding claim 12, Moore discloses the method, wherein said first data set comprises a first bitmap of image data representative of a first image, the first bitmap of image data including a first plurality of pixels, and wherein modifying the data within said first data set comprises changing at least one attribute of at least one of said first plurality of pixels (column 25, lines 50-59, refer to bit scale and pixels).

Regarding claim 16, Moore discloses the method, further comprising, displaying said first and second images (column 11, lines 43-56, refer to display).

Regarding claims 7, 13 and 19, it recites similar limitation as claims 6 and 12, are similarly analyzed.

Regarding claims 10, 14, 18 and 20, it recites similar limitation as claims 1 and 5, are similarly analyzed.

Allowable Subject Matter

6. Claims 15 and 17, are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims.

Conclusion

7. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-98300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner


DANIEL MIRIAM
PRIMARY EXAMINER

Group Art Unit 2625
August 28, 2004